

REMARKS

Below, the applicant's comments are preceded by related remarks of the examiner set forth in small bold font.

1. ... Claims 1-11, 13, 17-21, 25-26, 29-30, 33-34, and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauser et al. (USPN 5,889,956) (cited as pertinent prior art in previous Office Action) (hereinafter Hauser) in view of Nicola et al. ("Fast Simulation of the Leaky Bucket Algorithm" Proceedings of the 1994 Winter simulation Conferences Society for Computer Simulation International (c) 1994) (hereinafter Nicola).

2. Referring to independent claims 1, 10, 17, and 18, (e.g., exemplary claim 1), Hauser discloses a method comprising:

**representing, by a current resource usage value (i.e. actual use), a total amount of a resource that is managed by a software tool and is currently in use by both a first process and a second process (col. 5, lines 30-35; col. 8, lines 40-62);
for each of the first and second processes, specifying a maximum current usage level that is associated with the process (i.e. maximum allowed) (Figure 3, ref. 306, 308);**

in response to a request by one of the processes for additional use of the resource, allowing the process to make the requested additional use and increasing the current usage value by the amount of requested additional use, provided that the requested additional use plus the current usage would not exceed the maximum current usage level (i.e. Max_Allowed) associated with the requesting process (Figure 3, col. 8, line 62 to col. 9, line 48).

Hauser does not disclose that the total resource usage is decreased using a preset amount per unit of time. However it is well known and expected in the art that a system has the ability to have a resource usage decreased using a preset amount per unit of time. In support of this statement Nicola discloses a leaky bucket algorithm wherein tokens are generated at a fixed interval (i.e. preset amount per unit of time) (p. 266, col. 2, ¶ 2). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Nicola with Hauser to effectively police a QoS algorithm thereby increasing the fairness of the system and allowing starved processes access to the resource as supported by Nicola (p. 266, col. 2, ¶ 1).

The applicant disagrees with the examiner's characterization that the term "actual use" in Hauser represents a total amount of resource that is currently in use by both a first process and a second process. In Hauser, the term "actual use" refers to "the actual amount of resource utilized by an entity" (col. 4, lines 66-67). The examiner appears to contend that because the actual use of a higher level entity will include the actual uses of a first lower level entity and a second lower level entity that belong to the higher level entity, the actual use of the higher level entity represents the total amount of resource that is currently in use by the first and second lower level

entities. The examiner failed to take into account that the higher level entity itself may use the resource, so the actual use of the higher level entity can be more than the total amount of resource that is currently in use by the first and second lower level entities.

For example, in FIG. 1 of Hauser, if the engineering group 16 itself uses resources, then the actual use of the engineering group 16 may be more than the actual uses of the programming department 22 and hardware department 24.

Even if the “actual use” of a higher level entity in Hauser were to represent the total amount of resource that is currently in use by the lower level entities, Hauser does not disclose or suggest “associating with the first process a first maximum value of the aggregate current usage value; associating with the second process a second maximum value of the aggregate current usage value,” and “in response to a request by one of the processes for additional use of the resource, allowing the process to make the requested additional use and increasing the aggregate current usage value by the amount of requested additional use to a new aggregate current usage value, provided that the new aggregate current usage value would not exceed the maximum value associated with that process,” as required by claim 1.

In Hauser, in response to a request by the first lower level entity for additional use of the resource, the first lower level entity is allowed the requested additional use if the requested additional use plus the actual use of the higher level entity would not exceed the Maximum_Allowed assigned to the higher level entity. When the second process requests for additional use of the resource, the second lower level entity is allowed the requested additional use if the requested additional use plus the actual use of the higher level entity would not exceed the same Maximum_Allowed assigned to the higher level entity. Thus, Hauser teaches using the same maximum value for the first and second processes.

In the example shown in FIG. 1 of Hauser, if the examiner contends that the actual use of the engineering group 16 represents a total amount of resource that is currently in use by the programming department 22 and the hardware department 24, then the programming department 22 would be allowed a requested additional use if the requested additional use plus the actual current amount of resource utilized by the engineering group 16 would not exceed the

Maximum_Allowed assigned to the engineering group 16. Similarly, the hardware department 24 would be allowed a requested additional use if the requested additional use plus the actual current amount of resource utilized by the engineering group 16 would not exceed the Maximum_Allowed assigned to the engineering group 16. Thus, the programming department 22 and the hardware department 24 are associated with the same maximum actual use, which is the Maximum_Allowed assigned to the engineering group 16. This is different from claim 1, which requires “associating with the first process a first maximum value of the aggregate current usage value; associating with the second process a second maximum value of the aggregate current usage value.”

If the examiner takes the position that two lower level entities that belong to two different higher level entities would be associated with two different maximum values, then Hauser does not disclose an “aggregate current usage level” representing a total amount of resource used by the two lower level entities.

Using the example in FIG. 1 of Hauser, if the examiner contends that the programming department 22 is associated with the Maximum_Allowed assigned to the engineering group 16, and the marketing department 26 is associated with the Maximum_Allowed assigned to the Sales & Marketing group 18, then Hauser does not disclose or suggest an aggregate current usage level that represents the total amount of resource that is currently in use by the programming department 22 and the marketing department 26.

What is missing in Hauser is also not disclosed or suggested by Nicola, which discloses a leaky bucket algorithm.

Claims 10, 17, and 18 are patentable for at least similar reasons as claim 1.

The dependent claims are patentable for at least the same reasons as the claims on which they depend.

Cancelled and amended claims have been cancelled and amended, respectively, without prejudice. The applicant reserves the right to pursue those claims in a continuing application.

Any circumstance in which the applicant has addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner. Any circumstance in

which the applicant has made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims. Any circumstance in which the applicant has amended a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Enclosed is a \$120.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050, referencing attorney docket 10559-233001.

Respectfully submitted,

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** See attached document certifying that Rex Huang has limited recognition to practice before the U.S. Patent and Trademark Office under 37 CFR § 10.9(b).*